

I. IN THE CLAIMS

1.-7. Canceled.

8. (Previously presented) A system for accumulating customer transaction data at the point-of-sale in a retail establishment and for effectuating customer promotion on the basis thereof, comprising:

a terminal for entering unique customer identification codes from customer identification presented at the point-of-sale in a retail transaction;

means for allowing entry of customer transaction data;

a processor and

a memory responsive to said terminal and said means allowing entry for creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code; and

circuitry responsive to said processor, memory, and database for generating a customer information response signal at the point-of-sale during said individual customer's transaction in said retail establishment upon detection of a unique identification code of said individual customer,

said signal being related to said individual customer's transaction data in shopping visits prior to the current shopping visit, and

said signal providing information at said point-of-sale terminal derived from said database and useful for effectuating targeted customer promotion.

9. (Previously presented) A system for accumulating and using customer transaction data at the point-of-sale in a retail establishment comprising:

apparatus for entering unique customer identification codes from customer identification presented at the point-of-sale in said retail establishment;

a terminal for entering customer transaction data at the point-of-sale in said retail

establishment;

a processor and

a memory responsive to said apparatus and said terminal for creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code; and

circuitry associated with said memory and responsive to the entry of said individual customer's identification code during a transaction at the point-of-sale, said circuitry being operable to generate a customer information response signal at the point-of-sale representative of said individual customer's transaction history prior to the current shopping visit,

said signal providing information at said point-of-sale terminal derived from said database and useful for effectuating targeted customer promotion.

10. (Previously presented) A method for accumulating and using customer transaction data at the point-of-sale in a retail establishment comprising the steps of:

entering unique customer identification codes from customer identification presented at the point-of-sale in a retail transaction;

entering customer transaction data;

creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code; and

generating a customer information response at the point-of-sale during said individual customer's transaction in said retail establishment upon detection of a unique identification code of said individual customer,

said response signal being related to said individual customer's transaction data in shopping visits prior to the current shopping visit, and

said response providing information at said point-of-sale derived from said database and useful for effectuating targeted customer promotion.

11. (Previously presented) A method for accumulating and using customer transaction data at the point-of-sale in a retail establishment comprising the steps of:

- entering unique customer identification codes from customer identification presented at the point-of-sale in a retail establishment;
- entering customer transaction data at the point-of-sale in said retail establishment;
- creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code;
- accessing said database in response to the entry of said individual customer's identification code during a transaction at the point-of-sale;
- determining from said database the transaction history of said individual customer; and
- generating a customer information response at the point-of-sale representative of said individual customer's transaction history prior to the current shopping visit,

said response providing information at said point-of-sale derived from said database and useful for effectuating targeted customer promotion.

12. (Previously presented) A system according to Claim 8,

wherein said circuitry generates said customer information response signal as a function of analysis by said circuitry of said individual customer's transaction data following said detection of said unique identification code of said individual customer.

13. (Previously presented) A system according to Claim 9,

wherein said circuitry generates said customer information response signal as a function of analysis by said circuitry of said individual customer's transaction data following said entry of said individual customer's identification code.

14. (Previously presented) A method according to Claim 10,

wherein said generating step includes the step of generating said customer information response as a function of analysis of said individual customer's transaction data following said

detection of said unique identification code of said individual customer.

15. (Previously presented) A method for providing customer services in a retail establishment, comprising the steps of:

entering into a point-of-sale terminal a unique identification code for a customer;
entering into said terminal transaction data relating to the customer's shopping transactions;

generating and maintaining a database, including the step of correlating said transaction data with said unique identification code;

responding to entry, during a current transaction, of said unique identification code for a customer by analyzing said transaction data of the customer, including data in said database from prior transactions, with or without data from the current transaction, in order to generate a response which is a function of said data in said database from prior transactions, and by

supplying said response to said terminal during said current transaction in which said unique identification code is entered,

said response including information for effecting a targeted promotion to the customer.

16. (Canceled)

17. (Previously presented) A computer implemented system for providing a signal at a point-of-sale depending upon a customer's shopping history, comprising:

a terminal for entering, during a transaction, a unique customer identification;

a database storing transaction data from prior transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with an identification of that customer;

circuitry responsive to the entry of said unique customer identification at said terminal during said transaction for transmitting to said point-of-sale during said transaction a customer information response signal; and

wherein said customer information response signal depends upon data stored in said

database indicating dollar amount of at least one prior purchase associated with said unique customer identification.

18. (Previously presented) The system of claim 17 wherein said customer information response signal depends upon dollar amount of a plurality of prior purchases associated with said unique customer identification.

19. (Previously presented) The system of claim 17 wherein said customer information response signal also depends upon a frequency of prior purchases associated with said unique customer identification.

20. (Previously presented) The system of claim 17 wherein said terminal can also receive customer transaction data.

21. (Previously presented) The system of claim 17 wherein said data regarding said individual customer's prior transactions stored in association with said individual customer's identification in said database includes transaction frequency and dollar amount.

22. (Previously presented) A computer implemented method for providing a signal at a point-of-sale depending upon a customer's shopping history, comprising the steps of:
entering in a terminal, during a transaction, a unique customer identification;
storing, in a database, transaction data from prior shopping transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with said an identification of that customer;
transmitting to a point-of-sale during said transaction a customer information response signal in response to the entry of said unique customer identification at said terminal during said transaction; and
wherein said customer information response signal depends upon data stored in said database indicating dollar amount of at least one prior purchase associated with said unique

customer identification.

23. (Previously presented) The method of claim 22 wherein said customer information response signal depends upon dollar amount of a plurality of prior purchases associated with said unique customer identification.

24. (Previously presented) The method of claim 22 wherein said customer information response signal also depends upon a frequency of prior purchases associated with said unique customer identification.

25. (Previously presented) The method of claim 22 further comprising the step of receiving in said terminal customer transaction data.

26. (Previously presented) The method of claim 22 wherein said data regarding said individual customer's prior transactions stored in association with said individual customer's identification in said database includes transaction frequency and dollar amount.

27. (Currently Amended) A computer implemented system for updating data in a customer database, comprising:

a terminal for entering, during a transaction, a unique customer identification and transaction data for said transaction;

a database storing transaction data for a plurality of customers from prior shopping transactions, such that transaction data regarding prior transactions of a customer are stored in association with identification of that customer; and

circuitry responsive to the entry of said unique customer identification and said transaction data at said terminal for updating transaction data and a dollar amount of purchases associated with said unique customer identification in said customer database, and for storing in said customer database the date that transaction data association with said unique customer identification was updated.

28. (Previously presented) The system of claim 27 wherein said circuitry updates said transaction data associated with said unique customer identification during said transaction.

29. (Previously presented) The system of claim 27 wherein said database also stores a time of day that said transaction data was updated in association with said unique customer identification.

30. (Previously presented) A computer implemented method for updating data in a customer database, comprising the steps of:

entering in a terminal, during a transaction, a unique customer identification and transaction data for said transaction;

storing, transaction data for a plurality of customers from prior shopping transactions, such that data regarding a prior transactions of a customer are stored in association with identification of that customer; and

updating transaction data and a dollar amount of purchases associated with said unique customer identification in said customer database in response to entry of said unique customer identification and said transaction data at said terminal; and

storing in said customer database the date that transaction data association with said unique customer identification was updated.

31. (Previously presented) The method of claim 30 wherein said circuitry updates said transaction data associated with said unique customer identification during said

transaction.

32. (Previously presented) The method of claim 30 further comprising the step of storing in said database a time of day that said transaction data stored in association with said unique identification was updated.

33. (Previously presented) A computer implemented customer database comprising stored transaction data from prior point-of-sale transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with an identification of that customer said transaction data stored in association with an identification of that customer including:

dollar amount of purchases and time period.

34. (Previously presented) A computer implemented customer database comprising stored transaction data from prior transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with an identification of that customer, said transaction data stored in association with said identification of that customer including:

total dollar amount of purchases purchased during a period of time.

35. (Previously presented) The database of claim 34 wherein said period of time is one of a day and a week.

36. (Previously presented) The database of claim 34 wherein said transaction data stored in association with said identification of that customer further comprises a number of transactions associated with an identification of a customer.

37. (Previously presented) The database of claim 34 wherein said transaction data stored in association with said identification of that customer further comprises a frequency

of transactions.

38. (Previously presented) The database of claim 34 wherein said transaction data stored in association with said identification of that customer further comprises a frequency of transactions for a specified period of time associated with an identification of a customer.

39. (Previously presented) The database of claim 38 wherein said specified period of time is one of a day and a week.

40. (Previously presented) The system of any one of claims 17, 22, 27, 30, 33, and 34, wherein said database is local to the point-of-sale, said database stores transaction data from prior transactions for a plurality of customers such that data regarding a customer's prior transactions are stored in association with an identification of that customer, and said database is updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores.

41. (Previously presented) The system of claim 17 wherein said database stores the date that transaction data association with said unique customer identification was updated.

42. (Previously presented) The system of claim 17 wherein said terminal is in a first retail store, said database is a first store database, and said first store database is located at said first retail store.

43. (Previously presented) The system of claim 42 further comprising:
a second store database local at a second retail store, said second store database storing transaction data from prior transactions at said second store for a plurality of customers, such that data regarding a customer's prior transactions are stored in said second store database in association with a unique identification of that customer; and
a global database storing transaction data from prior transactions in both said first retail

store and said second retail store.

44. (Previously presented) The system of claim 43 further comprising at least one data connection, said at least one data connection enabling transmission of data stored in said first store database and said second store database to said global database, and enabling transmission of data from said global database to each one of said first store database and said second store database.

45. (Previously presented) The system of claim 44 configured to update customer records in said first store database based upon data stored in said global database.

46. (Previously presented) The system of claim 44 configured to update customer records in said first store database based upon data stored in said global database for transactions that occurred in said second retail store.

47. (Previously presented) The system of claim 46 configured to update customer records in said first store database based upon data transmitted to said global database from said second store database for transactions that occurred in said second retail store.

48. (Previously presented) The system of claim 46 configured to update customer records in said second store database based upon data stored in said global database for transactions that occurred in said first retail store.

49. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer transaction data including a first frequency of transactions by that customer during a first period of time.

50. (Previously presented) The database of claim 49, wherein said database is structured to store in association with said identification of that customer transaction data

including a second frequency of transactions by that customer during a second period of time.

51. (Previously presented) The database of claim 50, wherein said database is structured to store in association with said identification of that customer transaction data including a third frequency of transactions by that customer during a third period of time.

52. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer transaction data including a first dollar amount for one or more transactions by that customer during a first time period.

53. (Previously presented) The database of claim 52, wherein said database is structured to store in association with said identification of that customer transaction data including a second dollar amount for one or more transactions by that customer during a second time period.

54. (Previously presented) The database of claim 53, wherein said database is structured to store in association with said identification of that customer transaction data including a third dollar amount for one or more transactions by that customer during a third time period.

55. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a customer status.

56. (Previously presented) The database of claim 55, wherein said database is structured to store in association with said identification of that customer a date/time that said customer status changed.

57. (Previously presented) The database of claim 56, wherein said database is

structured to store in association with said identification of that customer a previous status of said customer.

58. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a user flag.

59. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a transfer date/time indicating when the customer's record was last written to disk.

60. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer an access date/time indicating when the customer's record was last accessed and updated.

61. (Previously presented) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a total number of transactions since a last global update, said global update updating data stored in association with said identification of that customer based upon data stored in association with said identification of that customer in a second database.

62. (Previously presented) The database of claim 61, wherein said database is structured to store in association with said identification of that customer a total dollar volume since said last global update.

63. (Previously presented) The database of claim 33, wherein said database is structured so that it is indexed at least by customer identification.

64. (Previously presented) The database of claim 33, wherein said database is

structured so that it is indexed at least by status.

65. (Previously presented) The database of claim 33, wherein said database is structured so that it is indexed at least by transfer date.

66. (Previously presented) A computer implemented system comprising:
computer implemented customer database comprising stored transaction data from prior point-of-sale transactions, said stored transaction data comprising:

(1) data for a first customer such that data regarding said first customer's prior transactions are stored in a first customer record associating a first customer identification of said first customer with at least a first customer first dollar amount; and

(2) data for a second customer such that data regarding said second customer's prior transactions are stored in a second customer record associating a second customer identification of said second customer with at least a second customer first dollar amount;

a point of sale terminal;

a digital data processor;

and wherein said system is programmed to respond to transaction information received from the point of sale terminal including said first customer identification by identifying said first customer record in said database, and returning to said point of sale terminal a first customer information response signal;

wherein a value of said first customer information response signal depends at least in part upon data stored in said first customer record, including at least said first customer first dollar amount.

67. (Previously presented) The system of claim 66 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer second dollar amount.

68. (Previously presented) The system of claim 67 wherein a value of said first

customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer third dollar amount.

69. (Previously presented) The system of claim 66 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer first frequency value.

70. (Previously presented) The system of claim 69 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer second frequency value.

71. (Previously presented) The system of claim 70 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer third frequency value.

72. (Previously presented) The system of claim 67 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer first frequency value.

73. (Previously presented) The system of claim 72 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer second frequency value.

74. (Previously presented) The system of claim 66 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer first status value.

75. (Previously presented) The system of claim 74 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first

customer first flag value.

76. (Previously presented) The system of claim 66 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer first time value.